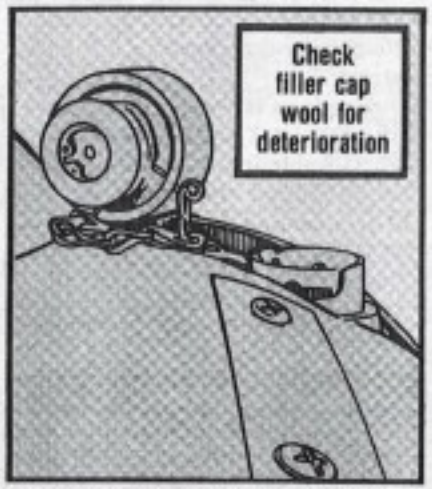
Change the Wool!

When the oil lab says you have high aluminum wear in a Huey or Cobra tail rotor driveshaft gearbox, you may be asked to flush, reservice,



and try it again. If the next sample still reads high in aluminum, the filler cap could be the culprit.

There's a bunch of aluminum wool inside the cap, held in place by a washer and retaining ring. In time, the wool goes bad and flakes off into the oil to give you a high reading.

It's easy to check out the cap. Lay it on a workbench, upside down. Press in on the washer and then release the pressure. The washer is supposed to spring back against the retaining ring. If it doesn't, the wool is worn out.

So remove the washer and retaining ring. Rub the wool between your fingers and notice how it crumbles... no wonder the oil was contaminated!

Toss out the old wool and clean out the cap. Put in enough new wool, NSN 5350-00-286-4851, to place the spacer under tension and insert the ring. The complete inspection and repair info is in Para 6-193c of TM 55-1520-210-23-1.

Change the oil in the gearbox, fly the bird, and send another sample to the oil lab. Chances are the gearbox is A-OK.